Atlanta Hartsfield International Airport Benchmarks

- The current capacity benchmark at Atlanta Hartsfield is 185-200 flights per hour in good weather.
- Current capacity falls to 167-174 flights (or fewer) per hour in adverse weather conditions, which may include poor visibility, unfavorable winds, or heavy precipitation.
- In 2000, Atlanta was ranked eighth most delayed airport in the country overall, slightly less than 3% of all flights were delayed significantly (more than 15 minutes).
- Scheduled operations at Atlanta are at or above good-weather capacity for almost two hours of the day.
- Atlanta has eight well-defined periods of highly concentrated arrival and departure traffic during the day.
- In adverse weather, capacity is lower and scheduled traffic exceeds capacity more than 8 hours of the day and the percentage of significantly delayed flights doubles to 6%.
- A new runway, planned for completion in 2005, is expected to improve Atlanta's capacity benchmark by 31% (to 243-258 flights per hour) in good weather and by 27% (to 212-219 flights per hour) in adverse weather. This assumes that airspace, ground infrastructure, and environmental constraints allow full use of the runway.
- In addition, technology and procedural improvements, when combined with the new runway are expected to increase Hartsfield's capacity benchmark by a total of 37% (to 254-269 flights per hour) in good weather over the next 10 years.
- The adverse weather capacity benchmark will increase by a total of 34% (to 224-231 flights per hour) compared to today.
- These capacity increases could be brought about as a result of:
  - PRM, which will allow triple simultaneous approaches with the new runway.
  - pFAST, which assists the controller with sequencing aircraft, for a better flow of traffic into the terminal area.
  - ADS-B/CDTI (with LAAS), which provides a cockpit display of the location of other aircraft and will help the pilot maintain the desired separation more precisely.
  - FMS/RNAV routes, which allow a more consistent flow of aircraft to the runway.
- Demand at Atlanta is expected to grow by 28% over the next 10 years. Capacity at Atlanta is expected to keep pace with the growth in demand, due primarily to the new runway at the airport.

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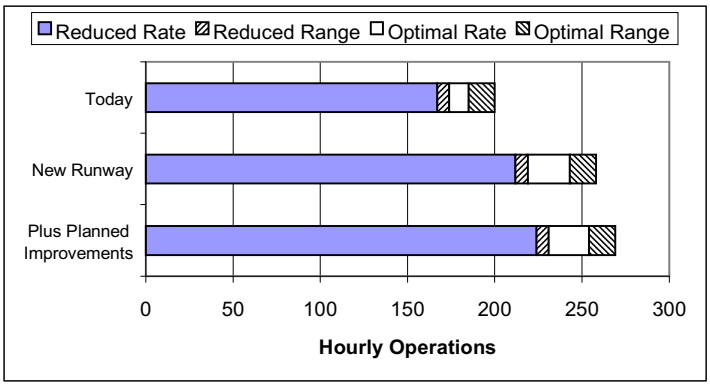
Airport Capacity Benchmarks – These values are for total operations achievable under specific conditions:

- **Optimum Rate** – Visual Approaches (VAPS), unlimited ceiling and visibility
- **Reduced Rate** – Most commonly used instrument configuration, below visual approach minima

Scenario	Optimum Rate	Reduced Rate
Today	**185-200**	**167-174**
New Runway	**243-258**	**212-219**
Plus planned improvements	**254-269**	**224-231**



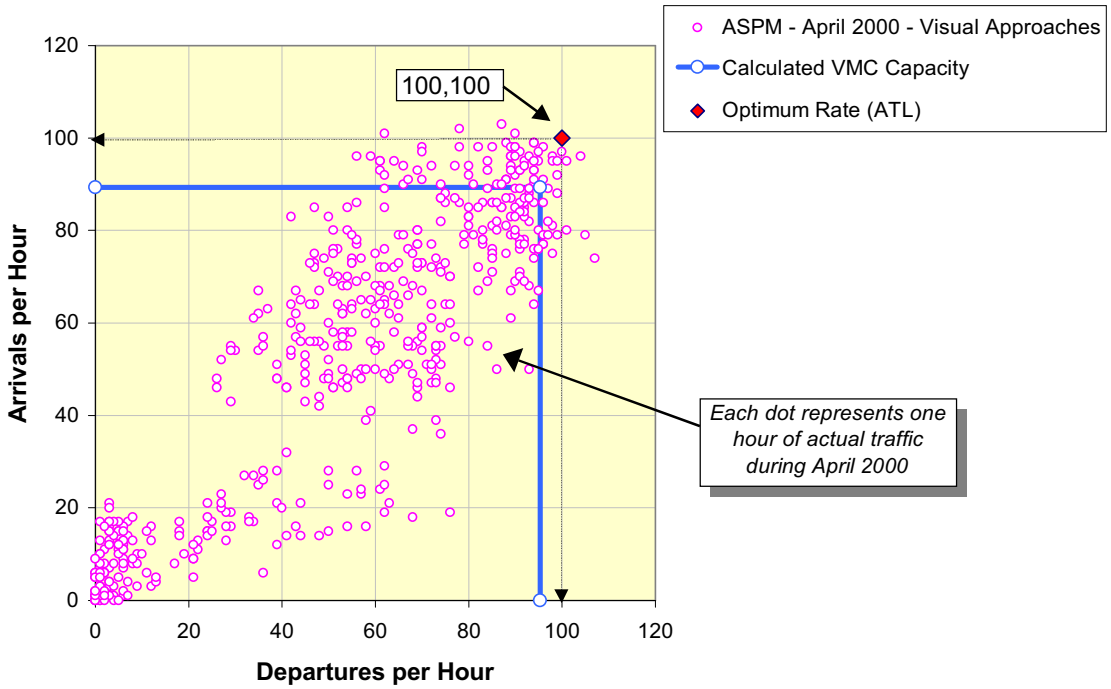
- The benchmarks describe an achievable level of performance for the given conditions, which can occasionally be exceeded. Lower rates can be expected under adverse conditions. Note: In some cases, facilities provided separate unbalanced maximum arrival and departure rates.
- Planned Improvements include:
  - PRM, which will allow triple simultaneous approaches with the new runway
  - pFAST, which assists the controller with sequencing aircraft, for a better flow of traffic into the terminal area
  - ADS-B/CDTI (with LAAS) – provides a cockpit display of the location of other aircraft. This will help the pilot maintain the desired separation more precisely.
  - FMS/RNAV Routes – allows more consistent delivery of aircraft to the runway threshold.
- Benefits from Planned Improvements assume that all required infrastructure and regulatory approvals will be in place. This includes aircraft equipage, airspace design, environmental reviews, frequencies, training, etc. as needed.
- **Note:** These benchmarks do not consider any limitation on airport traffic flow that may be caused by non-runway constraints at the airport or elsewhere in the NAS. Such constraints may include:
  - Taxiway and gate congestion, runway crossings, slot controls, construction activity
  - Terminal airspace, especially limited departure headings
  - Traffic flow restrictions caused by en route miles-in-trail restrictions, weather or congestion problems at other airports

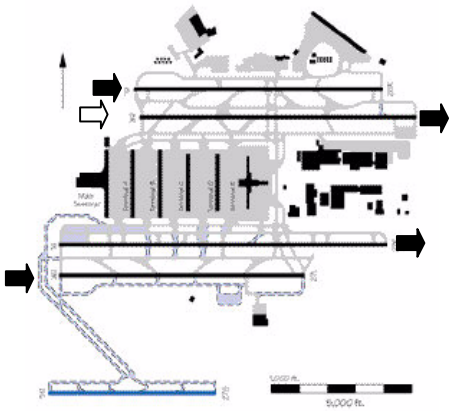
These values were calculated for the Capacity Benchmarking task and should not be used for other purposes, particularly if more detailed analyses have been performed for the individual programs.

The list of Planned Improvements and their expected effects on capacity does not imply FAA commitment to or approval of any item on the list.

Current Operations – Optimum Rate

- Visual approaches, visual separation – Optimum Rate of (100,100) was reported by the facility
  - Arrivals primarily to the two outer runways
  - Departures from two inner runways
- ASPM data is actual hourly traffic counts for the month of April 2000 for Visual Approach conditions. This data includes other runway configurations and off-peak periods.
  - ATL frequently operates at close to maximum rate
- Solid line represents the calculated airport capacity during a busy hour, and the tradeoff between arrivals and departure rates
  - ATL controllers are more flexible than the model, actively manage traffic for maximum throughput





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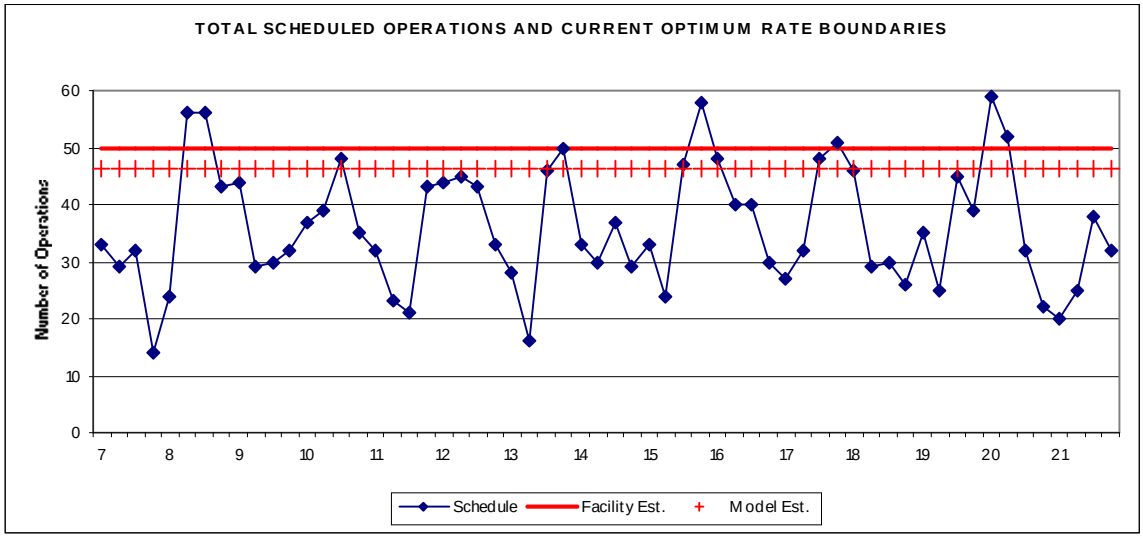
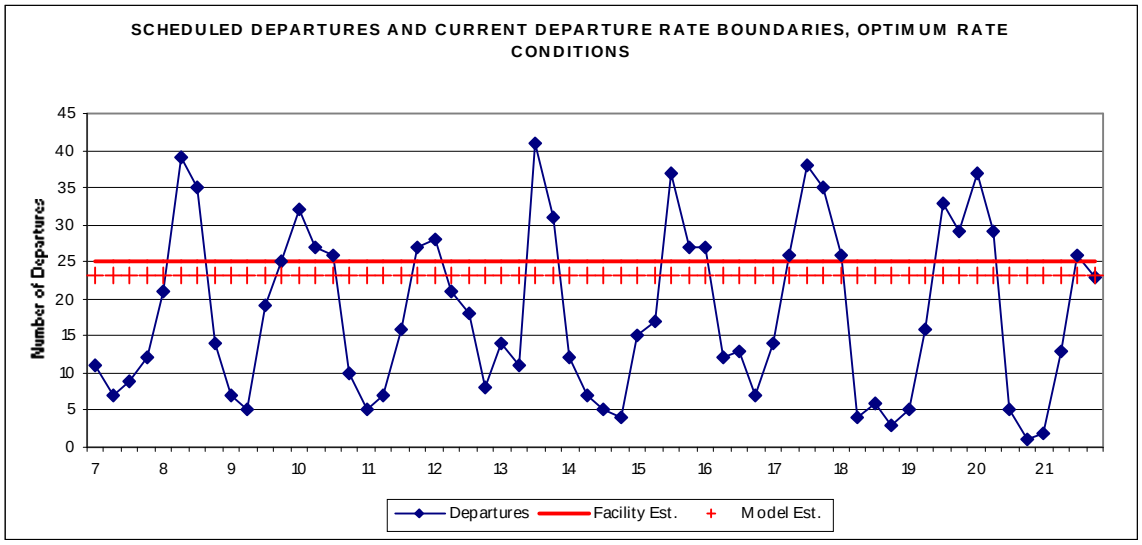
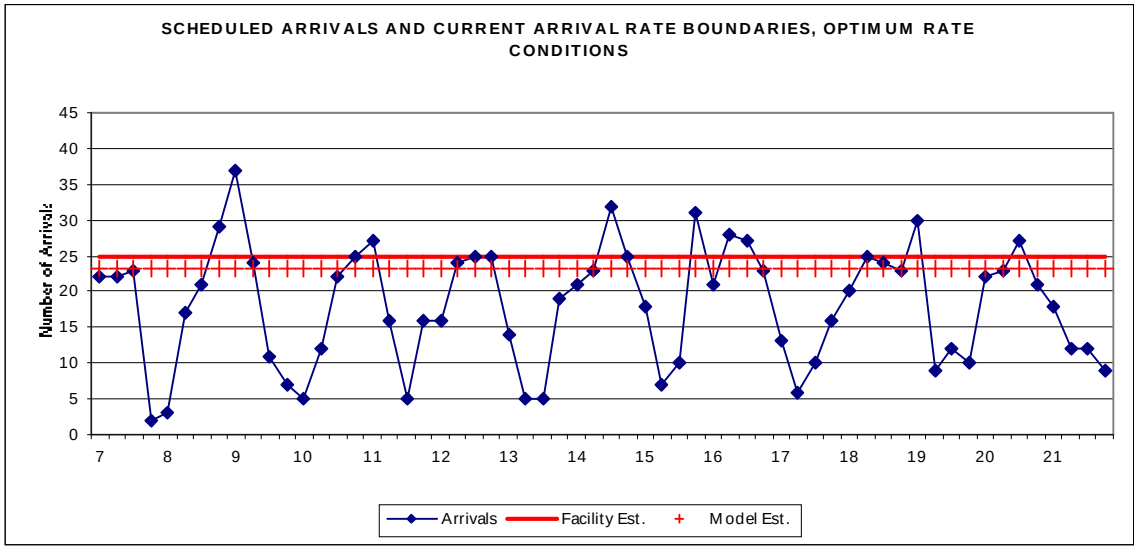
Scheduled Departures and Arrivals and Current Departure and Arrival Rate Boundaries (15-Minute Periods) Under Optimum Rate Conditions

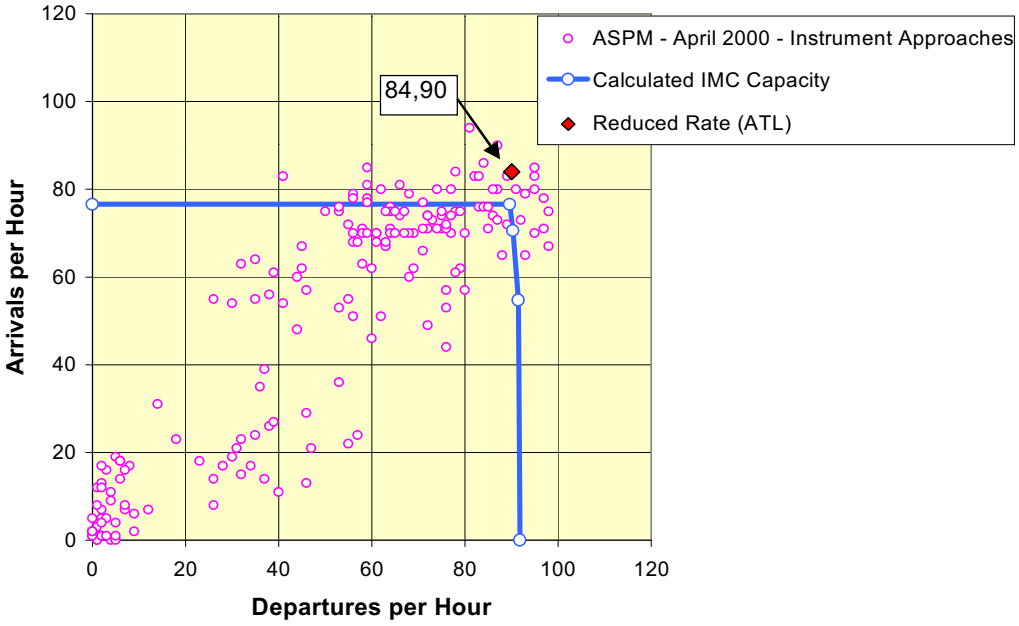


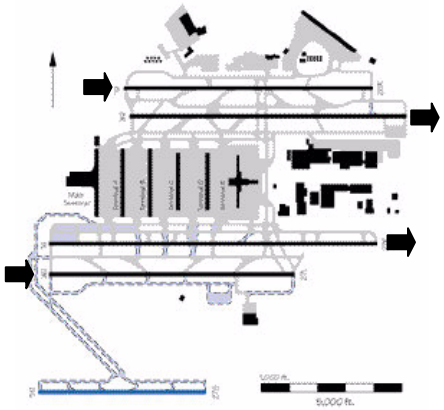




Current Operations – Reduced Rate

- Instrument approaches (below Visual Approach Minima)
  - Arrivals to the two outer runways
  - Departures from two inner runways
- Reduced Rate of (84,90) was reported by the facility
- ASPM data for “Instrument Approaches” can include marginal VFR, with higher acceptance rates
- Chart below represents observed traffic and expected rates in terms of operations per hour





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Scheduled Departures and Arrivals and Current Departure and Arrival Rate Boundaries (15-Minute Periods) Under Reduced Rate Conditions